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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,168

06/22/2006

Eric Labarriere

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EXAMINER

PALABRICA, RICARDO J

ART UNIT

PAPER NUMBER

3663

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,168	<b>Applicant(s)</b> LABARRIERE ET AL.	
	<b>Examiner</b> Rick Palabrica	<b>Art Unit</b> 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 24 and 26-46 is/are pending in the application.
- 4a) Of the above claim(s) 29, 38 and 41-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24, 26-28 30-37, 39 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's RCE submission filed on 2/5/09, which directly amended claims 24 and 36, and traversed the rejection of claims in the 11/03/08 Office action, has been entered.

Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 24, 26 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Bryan et al. (U.S. 5,071,617) or Manson (U.S. 4,772,447).

Bryan et al.

Bryan et al. disclose a fuel assembly for a PWR comprising (see Figs. 1-7): a) fuel rods 17; b) a support skeleton comprising two terminal end pieces 12 and 20; and c) guide tubes 14.

As to claims 24 and 36, applicant's claim language, "noses" reads on hollow bosses 26 (see Fig. 2). As to the limitation, "wherein the noses converge in a direction that is orientated towards the outer side of the end piece," note the tapered configuration of internal surface of each nose on the topside. This configuration shows convergence towards the bottom of and away from the center of fuel rods, and meets said limitation. The claim recites "outer side" of the terminal end piece as the side "facing opposite the fuel rods." Applicant has not defined the phrase, "opposite the fuel rods", and absent such definition, the examiner interprets the phrase broadly and reads it on "bottom of and away from the center of the fuel rods", as in Bryan et al.

As to claim 26, see Fig. 2 and col. 2, lines 65+.

Manson et al.

Manson et al. disclose a fuel assembly for a PWR comprising (see Figs. 1-8) : a) fuel rods 2; b) a support skeleton comprising two terminal end pieces (e.g., upper end piece 12 and lower end piece being the combination of element 10 and sleeve 90 (see Fig. 8); c) guide tubes 18.

As to claims 24 and 36, applicant's claim language, "nose" reads on sleeve 90 having curved elastic strips 98 (see Fig. 8 and col. 5, lines 5+). As to the limitation,

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“wherein the noses converge in a direction that is orientated towards the outer side of the end piece,” note the curved configuration of elastic strip 98, especially the lower part of this strip. This configuration of the lower strip part shows convergence towards the bottom of and away from the center of the fuel rods, and meets said limitation. The claim recites “outer side” of the terminal end piece as the side “facing opposite the fuel rods.” Applicant has not defined the phrase, “opposite the fuel rods”, and absent such definition, the examiner interprets the phrase broadly and reads it on “bottom of and away from the center of the fuel rods”, as in Manson et al.

As to claim 26, see Fig. 8.

The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, “for a fuel assembly of a pressurized water nuclear reactor”, etc. These clauses, as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

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Any one of the systems in the cited references is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited references.

3. Claims 28, 30, 31, 34, 35, 37, 39 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Manson et al.

As to claims 28 and 37, applicant's claim language, "arrangement for laterally maintaining the adjacent longitudinal ends of the fuel rods" reads on tongue 52 that join adjacent sleeves (e.g., see Fig. 4 and col. 4, lines 23+).

As to claims 30 and 39, applicant's claim language, "arrangement for longitudinally securing the adjacent longitudinal ends of the fuel rods" reads on groove 102 and collar 100 arrangement (see Fig. 8 and col. 5, lines 7+).

As to claims 31 and 40, applicant's claim language, "two components" reads on two opposing collars 100 (see Fig. 8).

As to claims 34 and 35, the bottom end piece 10 has feet (see Fig. 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 27 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Bryan et al. or Manson et al., as applied to claims 24, 26 and 36 above and further in view of Grattier.

Bryan et al. and Manson et al. have been discussed above.

Grattier has been discussed in the 4/3/08 and 11/3/08 Office actions, which discussions are herein incorporated

As to claim 27, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus either one of Bryan et al. and Manson et al., by the teaching of Grattier, to use screws as additional fixing members, to gain the advantages thereof (i.e., further strengthen the attachment of the guide tubes to the terminal end piece), because such modification is no more than the use of a well known expedient within the nuclear art.

As to claim 32, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus either one of Bryan et al. and Manson et al., by the teaching of Grattier, to use an anti-debris filter, to gain the advantages thereof (i.e., protect the integrity of the fuel rods) because such modification is no more than the use of a well known expedient within the nuclear art.

5. Claim 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Manson et al., as applied to claims 24, 26 and 36 above and further in view of Grattier.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Manson et al., by the teaching of

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Grattier, to use an anti-debris filter, to gain the advantages thereof (i.e., protect the integrity of the fuel rods) because such modification is no more than the use of a well known expedient within the nuclear art.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References C and D further illustrate prior art.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rick Palabrica/  
Primary Examiner, Art Unit 3663

March 3, 2009